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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,459	06/14/2006	Pim Theo Tuyls	NL031493	6902
24737 7590 10/30/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
STU, SARAH				
ART UNIT		PAPER NUMBER		
2431				
MAIL DATE		DELIVERY MODE		
10/30/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/596,459

Applicant(s)

TUYLS ET AL.

Examiner

Sarah Su

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Preliminary Amendment, received on 14 June 2006, has been entered into record. In this amendment, claims 4-12 have been amended.
2. Claims 1-12 are presented for examination.

Priority

3. The claim for priority from PCT/IB04/52781 filed on 13 December 2004 is duly noted.
4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

5. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.
6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (f) BACKGROUND OF THE INVENTION.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Claim Objections

8. Claims 11 and 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 recites a system comprising a device according to claim 1. This does not further limit the device of claim 1. Claim 12 recites an array of combined display elements for use in a device according to claim 1. This does not further limit the device of claim 1.

9. It is noted that claim 1 contains the symbol "-", which is non-functional. The examiner requests that these be removed.

10. Claims 11 and 12 are objected to because of the following informalities:

- a. In claim 11, line 2: "a device" is unclear if it relates to "A device" (claim 1, line 1);
- b. In claim 12, line 2: "integrated sensor elements" is unclear if it relates to "integrated sensor elements" (claim 1, line 8).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
13. The term "substantially" in claims 6 and 7 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claim 6 recites "wherein the array of display elements is substantially transparent" in lines 2-3. Claim 7 recites "wherein the array of display elements is substantially opaque" in lines 2-3. The term "substantially" is not defined by the claim and is indefinite.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 1, 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (US 2002/0101988 A1) in view of Schrijen et al. (WO 03/067797 A1 and Schrijen hereinafter).

As to claim 1, Jones discloses a system and method for decryption using optical decryption glasses, the system and method having:

an array of sensor elements (11) for sensing a first image (A) (0018, lines 3-5),

an array of display elements (12) for displaying a second image (B)
(0006, lines 7-9).

Jones does not disclose:

wherein at least some display elements are combined elements (13)
which comprise integrated sensor elements.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses a system and method for secure visual message communication, the system and method having:

wherein at least some display elements (i.e. LCD) are combined
elements (13) which comprise integrated sensor (i.e. input) elements (page
5, lines 15-17).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by using integrated sensor elements. Schrijen recites motivation by disclosing that using a touch-screen is a very easy way of selecting input on a display (page 5, line 17). It is obvious that the teachings of Schrijen would have improved the teachings of Jones by using integrated sensor elements in order to allow for easy input on a display.

As to claim 4, Jones does not disclose:

wherein the sensor elements (11) and the display elements (12) face in the same direction.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses:

wherein the sensor elements (11) and the display elements (12) face in the same direction (page 5, lines 15-17).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by facing the sensors and displays in the same direction. Please refer to the motivation recited above in respect to claim 1 as to why it is obvious to apply the teachings of Schrijen to the teachings of Jones.

As to claim 5, Jones discloses:

wherein the sensor elements (11) and the display elements (12) face in opposite directions (51,57, Figure 7).

As to claim 6, Jones does not disclose:

wherein the array of display elements (12) is substantially transparent.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses:

wherein the array of display elements (12) is substantially transparent (page 1, lines 14-17).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by using a transparent array.

Schrijen recites motivation by disclosing that using transparent arrays allows them to be stacked in order to recover messages (page 1, lines 17-19). It is obvious that the teachings of Schrijen would have improved the teachings of Jones by using a substantially transparent array in order to allow arrays to be stacked to provide a combined image.

As to claim 7, Jones discloses:

wherein the array of display elements (12) is substantially opaque (Figure 4), **the device preferably being arranged for permuting the first image (A) so as to produce the second image (B)** (0006, lines 4-9).

As to claim 8, Jones does not disclose:

wherein the first image (A) comprises positioning information for positioning the device.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses:

wherein the first image (A) comprises positioning information for positioning the device (page 12, lines 4-6, 30-32).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by providing positioning information. Schrijen recites motivation by disclosing that providing positioning information makes it easy for the user to properly superimpose the images because the positioning must be exactly correct (page 12, line 33; page 13, lines 1-2). It is obvious that the teachings of Schrijen would have improved the teachings of Jones by providing positioning information in order to allow the user to properly superimpose the images.

As to claim 9, Jones does not disclose:

wherein the first image (A) comprises user identification information.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses:

wherein the first image (A) comprises user identification information
(i.e. password, pin) (page 5, lines 7-9).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by providing user information.

Schrijen recites motivation by disclosing that using a password or pin as information allows the server to verify the credentials of the user (page 15, lines 10-13). It is obvious that the teachings of Schrijen would have improved the teachings of Jones by using user identification information in order to allow authentication of the user.

As to claim 10, Jones discloses:

further arranged for receiving user input via the sensor elements (11) and transmitting the user input to a terminal (2) (i.e. kiosk) (0020, lines 3-5, 8-11).

As to claim 11, Jones discloses:

A system for visual cryptography, comprising a device (1) according to claim 1 (Figure 1).

As to claim 12, Jones does not disclose:

An array of combined display elements (13) having integrated sensor elements (11) for use in the device according to claim 1.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones, as evidenced by Schrijen.

Schrijen discloses:

An array of combined display elements (13) having integrated sensor elements (11) for use in the device according to claim 1 (page 5, lines 15-17).

Given the teaching of Schrijen, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones with the teachings of Schrijen by using integrated sensor elements in a display. Please refer to the motivation recited above in respect to claim 1 as to why it is obvious to apply the teachings of Schrijen to the teachings of Jones.

17. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Schrijen as applied to claim 1 above, and further in view of Bright (US 2003/0124392 A1).

As to claim 2, Jones in view of Schrijen does not disclose:

wherein the combined elements (13) are constituted by polymer organic LED elements.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones in view of Schrijen, as evidenced by Bright.

Bright discloses a system and method for transparent conductive articles, the system and method having:

wherein the combined elements (13) are constituted by polymer organic LED elements (0104, lines 6-11).

Given the teaching of Bright, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones in view of Schrijen with the teachings of Bright by using polymer

organic LEDs as elements. Bright recites motivation by disclosing that the LEDs can be used in a lightweight, flexible, plastic substrate in displays (Abstract, lines 1-2). It was also well known in the art at the time of the invention that organic LEDs require less power than traditional LCDs. It is obvious that the teachings of Bright would have improved the teachings of Jones in view of Schrijen by using organic LED elements in order to provide a lightweight and flexible display that requires less power than LCDs.

As to claim 3, Jones in view of Schrijen does not disclose:

wherein the combined elements (13) are constituted by small molecule organic LED elements.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Jones in view of Schrijen, as evidenced by Bright.

Bright discloses:

wherein the combined elements (13) are constituted by small molecule organic LED elements (0104, lines 6-11).

Given the teaching of Bright, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Jones in view of Schrijen with the teachings of Bright by using small molecule organic LEDs. Please refer to the motivation recited above in respect to claim 2 as to why it is obvious to apply the teachings of Bright to the teachings of Jones in view of Schrijen.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Su whose telephone number is (571) 270-3835. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Su/
Examiner, Art Unit 2431

/Christopher A. Revak/
Primary Examiner, Art Unit 2431